

To:

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

| United States | Patent and | Trademark |
|-----------------|------------|-----------|
| Office | | |
| (Box PCT) | | |
| Coursel Diams 2 | , | |

Crystal Plaza 2 Washington, DC 20231 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year)
17 August 1998 (17.08.98)

International application No.
PCT/GB98/00015

International filing date (day/month/year)
05 January 1998 (05.01.98)

Applicant
HORNE, James, Anthony et al

| 1. | The designated Office is hereby notified of its election made: |
|----|---|
| | X in the demand filed with the International Preliminary Examining Authority on: |
| | 29 July 1998 (29.07.98) |
| | in a notice effecting later election filed with the International Bureau on: |
| | |
| 2. | The election X was was was not |
| | made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b). |
| | |
| | |
| | |
| | |

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Peggy Steunenberg

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

Copy for the Elected Office (EO/US)

PATENT COOPERATION TREATY

| | | From ti | he INTERNATIONAL E | BUREAU |
|---|--|----------------|--|-----------------------------|
| | PCT | To: | | |
| Γ | NOTIFICATION OF THE RECORDING OF A CHANGE (PCT Rule 92bis.1 and Administrative Instructions, Section 422) Date of mailing (day/month/year) | 1 Mi War | BROOK, Christopher, II Street wick CV34 4HB 'AUME-UNI | John |
| | 02 October 1998 (02.10.98) | | | a 9 |
| 1 | Applicant's or agent's file reference DC277IP97040 | | IMPORTANT NOT | TIFICAT ON |
| | International application No. PCT/GB98/00015 | | onal filing date (day/month/ anuary 1998 (05.01.98 | |
| | The following indications appeared on record concerning: The applicant | tne agei | nt the comm | non representative |
| | Name and Address HORNE, James, Anthony 9 The Drive Woodhouse Eaves Leicestershire LE11 3TU United Kingdom | | State of Nationality GB Telephone No. | State of Residence GB |
| | | | Facsimile No. Teleprinter No. | |
| | 2. The International Bureau hereby notifies the applicant that the the person the name X the add | | g change has been recorded the monality | d concerning: the residence |
| | Name and Address HORNE, James, Anthony 14 Paterson Drive Woodhouse Eaves Loughborough | | State of Nationality GB Telephone No. | State of Residence GB |
| * | Leicestershire LE12 8RL, United Kingdom The Sauce on the Sauce on the Sauce of the | | Facsimile No. Teleprinter No. | |
| | 3. Further observations, if necessary: | | 4 | |
| | 4. A copy of the notification has been sent to: | | | |
| | X the receiving Office the International Searching Authority X the International Preliminary Examining Authority | | the designated Offices of the elected Offices of other: | |
| | The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland | Authorize | | |
| | Facsimile No.: (41-22) 740.14.35 | l Telephone | e No.: (41-22) 338.83.38 | |

| · | From the INTERNATIONAL BUREAU |
|---|--|
| PCT | То: |
| NOTIFICATION OF THE RECORDING OF A CHANGE (PCT Rule 92bis 1 and Administrative Instructions, Section 422) | TILLBROOK, Christopher, John 1 Mill Street Warwick CV34 4HB ROYAUME-UNI |
| Date of mailing (day/month/year) 02 October 1998 (02.10.98) | |
| Applicant's or agent's file reference DC277IP97040 | IMPORTANT NOTIFICATION |
| International application No. PCT/GB98/00015 | International filing date (day/month/year) 05 January 1998 (05.01.98) |
| The following indications appeared on record concerning: X the applicant X the inventor Name and Address | the agent the common representative State of Nationality State of Residence |
| REYNER, Louise, Ann 20 Station Road Quorn Leicestershire LE12 8BS United Kingdom | GB GB Telephone No. |
| 2. The International Bureau hereby notifies the applicant that the | |
| the person the name X the add | |
| Name and Address REYNER, Louise, Ann | State of Nationality State of Residence GB GB |
| 14 Paterson Drive Woodhouse Eaves Loughborough | Telephone No. |
| Leicestershire LE12 8RL United Kingdom Adduess en flee de cla rasion | Facsimile No. |
| the sauce | Teleprinter No. |
| 3. Further observations, if necessary: | |
| 4. A copy of this notification has been sent to: | |
| X the receiving Office | the designated Offices concerned |
| the International Searching Authority | X the elected Offices concerned |
| X the International Preliminary Examining Authority | other: |
| T | Authorized officer |
| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland | P. Regis |

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

t



PATENT COOPERATION TREATY 2 8 ELC. 199 8

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

| | | (PCT Article 36 and P | Rule 70) |
|----------------|--|---|--|
| Applicant's or | agent's file reference | FOR FURTHER ACTION | See Notification of Transmittal of International |
| DC277IP9 | 7040 | FOR FORTHER ACTION | Preliminary Examination Report (PCT/IPEA/416) |
| nternational | application No. | International filing date (day/month/ye | ear) Priority date (day/month/year) |
| PCT/GB98 | 3/00015 | 05/01/1998 | 04/01/1997 |
| nternational | Patent Classification (IPC) | or national classification and IPC | |
| G08B21/0 | | | |
| | | | |
| | | | |
| Applicant | | | · |
| HORNE, J | ames Anthony et al | | |
| | | | |
| 1. This int | ernational preliminary e | xamination report has been prepared t | by this International Preliminary Examining Authority |
| and is t | ransmitted to the applic | ant according to Article 36. | |
| | | | |
| 2. This RI | EPORT consists of a tot | al of 5 sheets, including this cover sh | eet. |
| ⊠ TH | sis report is also accome | panied by ANNEXES, i.e., sheets of the | e description, claims and/or drawings |
| wl | nich have been amende | d and are the basis for this report and/ | or sheets containing rectifications made |
| be | fore this Authority (see | Rule 70.16 and Section 607 of the Adr | ministrative Instructions under the PCT). |
| Thoso | annexes consist of a tot | al of 2 sheets | |
| Inese | annexes consist of a tot | aror 2 sneets. | |
| | | | |
| 3. This re | port contains indications | s relating to the following items: | |
| 1 | ⊠ Basis of the repo | ort | |
| 11 | ☐ Priority | | |
| III | • | ent of opinion with regard to novelty, in | ventive step and industrial applicability |
| IV | ☐ Lack of unity of i | | · |
| V | _ , | | novelty, inventive step or industrial applicability; |
| | citations and exp | planations supporting such statement | |
| VI | □ Certain docume | nts cited | |
| VII | Certain defects i | n the international application | |
| VIII | □ Certain observation | tions on the international application | |
| | | | |
| | · | | |
| Date of sub | mission of the demand | Date of c | completion of this report |
| | | | 7 7 12 00 |
| 29/07/199 | 98 | | 2 2. 12. 38 |
| Name and r | mailing address of the IPEA | / Authorize | ed officer |
| | . | 1 | and the state of t |
| | European Patent Office | Wright | |
| <i>)</i>)) | D-80298 Munich Tel. (+49-89) 2399-0, Tx | | kg |
| | Fax: (+49-89) 2399-446 | | ne No. (+49-89) 2399-2705 |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB98/00015

I. Basis of the report

1. This report has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):

| | the report since they do not contain amendmonts.; | | | | | |
|----|---|-------------------------------------|---|--------------------------------|----------------------|--------------------------|
| | Des | cription, pages: | | | | |
| | 1-15 | 5 | as originally filed | | | |
| | Clai | ims, No.: | | | | |
| | 1-10 |) | as received on | 30/11/1998 | with letter of | 27/11/1998 |
| | Dra | wings, sheets: | | | | |
| | 1/30 |)-30/30 | as originally filed | | | |
| | | | | | | |
| 2. | The | amendments have | e resulted in the cancellation of | : | | |
| | | the description, | pages: | | | |
| | | the claims, | Nos.: | | | |
| | | the drawings, | sheets: | | | |
| 3. | | This report has be considered to go | een established as if (some of) beyond the disclosure as filed | the amendme (Rule 70.2(c)): | nts had not been mad | le, since they have been |
| 4. | Ado | ditional observation | ns, if necessary: | | | |



International application No. PCT/GB98/00015

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes:

Claims 1-10

No:

Claims

Inventive step (IS)

Claims Yes:

Claims No:

Industrial applicability (IA)

Yes:

Claims 1-10

1-10

No:

Claims

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT - SEPARATE SHEET**

- The following document(s) will be referred to in this report; the numbering will be adhered 1. to in the rest of the procedure:
 - D1 DE-A-44 00 207 [MITSUBISHI JIDOSHA KOGYO K.K.]

The subject-matter of document D1 is considered to represent the prior art the closest to that of the present application.

In the following discussion, the patentability of the claims will be examined with regard to 2. the requirements of the PCT. In particular, the claims will be examined for novelty, as defined in 33(2) PCT, and for inventive step, as defined in Art. 33(3) PCT. In addition other aspects, such as clarity requirements of Art. 6 PCT, may be discussed as appropriate.

2.1 Claim 1

As far as can be understood, claim 1 appears to be new, Art. 33(2) PCT. However, claim 1 lacks an inventive step over the prior art, Art. 33(3) PCT.

Document D1 is considered to represent the closest prior art to the present invention. Claim 1 differs from D1 in that it comprises a personal data interface. The person skilled in the art would provide whatever interface was required without making an inventive step. The inclusion of this feature is therefore considered not to represent an inventive step. However, it is noted that if a new claim had been filed where such personal data was used in arriving at the detection of sleepiness, the examiner is of the provisional opinion that this could have been considered as an inventive feature. In the present claim this is merely an optional feature.

Claim 1 is not allowable under Art. 6 PCT since it is unclear for the following reasons:

- the feature "of circadian algorithm" has no meaning. a.
- Claims 2 to 4. 2.2

Claim 2 to 4 are not allowable because they lack an inventive step, Art. 33(3) PCT. The reason being that none of the features of claims 6 to 10 appear to contribute subject matter which goes beyond routine work for the person skilled in the art.

2.3 Claim 5

Claim 5 is not allowable since it contains subject matter which is not found in the original

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT - SEPARATE SHEET**

disclosure, in particular the feature of "driver or operator environment" is broader than the term "cab temperature" upon which it appears to be based. The claim therefore appears to be not allowable under Art. 34 2 b PCT.

If this feature were returned to it's original form, it would however not involve an inventive step. The examiner is of the opinion that it is obvious to monitor cab temperature in assessing sleep tendency.

2.4 Claim 6

Claim 6 merely offers an alternative sleepiness causing monitor factor to the prior art D1. The person skilled in the art would use any such data for monitoring sleep tendency without making an inventive step.

2.5 Claims 7 and 8

Claims 7 and 8 contain subject matter which appears to be both new and to involve an inventive step, Art. 33(2) and (3) PCT.

2.6 Claim 9

Claim 9 relies for the definition of its scope on features which are only to be found in the drawings. As such the scope of the claim is unclear and it therefore offends against Art. 6 PCT.

2.7 Claim 10

D1 also discloses a vehicle, see fig. 2, therefore the subject matter of claim 10, which refers to claim 1, is lacking in inventive step, Art. 33(3) PCT.

Claim 10 would have been allowable, had it referred to claims which were themselves allowable.

- In the following section, certain defects in the International Application will be noted. 3.
- Document D1 should have been mentioned in the description in accordance with Rule 5.1 3.1 a ii PCT
- The description should have been brought into accordance with the claims presently on file 3.2 in accordance with Rule 5.1 a iii PCT.





PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference | (Form PCT/ISA/ | of Transmittal of International Search Report 220) as well as, where applicable, item 5 below. |
|---|---|---|
| DC277IP97040 | ACTION | |
| International application No. | International filing date (day/month/year) | (Earliest) Priority Date (day/month/year) |
| PCT/GB 98/00015 | 05/01/1998 | 04/01/1997 |
| Applicant | | · |
| | | |
| HORNE, Jim, A. et al. | | • |
| | | |
| This International Search Report has bee according to Article 18. A copy is being tra | n prepared by this International Searching Aut ansmitted to the International Bureau. | hority and is transmitted to the applicant |
| This International Search Report consists | of a total of 2 sheets | |
| 1 — | y of each prior art document cited in this repor | t. |
| | | |
| | | |
| Certain claims were found un | searchable(see Box I). | |
| | • | |
| 2. Unity of invention is lacking(s | see Box II). | |
| | | • |
| 3. The international application co | ntains disclosure of a nucleotide and/or amir | o acid sequence listing and the |
| | out on the basis of the sequence listing | |
| filed | with the international application. | |
| furn | ished by the applicant separately from the inte | rnational application, |
| [| but not accompanied by a statement to the matter going beyond the disclosure in the | |
| | matter going beyond the disclosure in the | e international application as theu. |
| Tra. | nscribed by this Authority | |
| | noonbed by this Additionty | |
| · | | |
| 4. With regard to the title, χ the | text is approved as submitted by the applicant | <u>.</u> |
| | text has been established by this Authority to | read as follows: |
| _ | | • |
| | | |
| | • | |
| 5. With regard to the abstract, | | |
| X the | text is approved as submitted by the applicant | t . |
| the | text has been established, according to Rule 3 | 88.2(b), by this Authority as it appears in |
| | III. The applicant may, within one month from trch Report, submit comments to this Authority | |
| Jean | | • |
| | • | |
| 6. The figure of the drawings to be publ | ished with the abstract is: | |
| Figure No1 X as s | suggested by the applicant. | None of the figures. |
| bec | ause the applicant failed to suggest a figure. | |
| bec | ause this figure better characterizes the inven- | tion. |
| | | |

INTERNOONAL SEARCH REPORT

| | · | | |
|--------------|---|--|------------------------|
| IPC 6 | IFICATION OF SUBJECT MATTER G08B21/00 | | |
| According t | o International Potent Classification (IPC) or to both notional class | sification and IPC | |
| | o International Patent Classification(IPC) or to both national class | sincation and IPC | |
| | SEARCHED ocumentation searched (classification system followed by classifi | cation symbols) | <u> </u> |
| IPC 6 | G08B A61B | | |
| Documenta | tion searched other than minimum documentation to the extent th | at such documents are included in the fields se | arched |
| | | | |
| | | | |
| Electronic d | data base consulted during the international search (name of data | a base and, where practical, search terms used |) |
| | | | |
| | | | |
| | · | | |
| | ENTS CONSIDERED TO BE RELEVANT | | |
| Category ° | Citation of document, with indication, where appropriate, of the | relevant passages | Relevant to claim No. |
| Α | DE 44 00 207 A (MITSUBISHI) 7 see claims 1-18 | July 1994 | 1-11 |
| А | EP 0 713 675 A (PIONEER ELECTRO 29 May 1996 see claims 1-5 | ONIC CORP.) | 1-11 |
| A | WO 95 05649 A (VORAD SAFETY SYS February 1995 see abstract | STEMS) 23 | 1-11 |
| | | V | |
| | | | |
| | | • | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | · · · · · · · · · · · · · · · · · · · | |
| Furt | her documents are listed in the continuation of box C. | Y Patent family members are listed | in annex. |
| ° Special ca | ategories of cited documents : | "T" later document published after the inte | rnational filing date |
| | ent defining the general state of the art which is not | or priority date and not in conflict with cited to understand the principle or th | the application but |
| | dered to be of particular relevance document but published on or after the international | invention "X" document of particular relevance; the | , , , |
| filing o | | cannot be considered novel or cannot involve an inventive step when the do | t be considered to |
| which | is cited to establish the publication date of another in or other special reason (as specified) | "Y" document of particular relevance; the | claimed invention |
| "O" docum | ent referring to an oral disclosure, use, exhibition or | cannot be considered to involve an in document is combined with one or mo | ore other such docu- |
| | means ent published prior to the international filing date but | ments, such combination being obvio in the art. | us to a person skilled |
| later ti | han the priority date claimed | "&" document member of the same patent | |
| Date of the | actual completion of theinternational search | Date of mailing of the international sea | arch report |
| . 2 | 5 March 1998 | 03/04/1998 | |
| Name and | mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 | Authorized officer | |
| | NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | Sgura, S | |



| In | al Application No |
|--------|-------------------|
| PCT/GE | 3 98/00015 |

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|---|--|
| DE 4400207 A | 07-07-94 | JP 6197888 A KR 9710575 B US 5574641 A | 19-07-94 28-06-97 12-11-96 |
| EP 713675 A | 29-05-96 | JP 8140949 A | 04-06-96 |
| WO 9505649 A | 23-02-95 | US 5465079 A AU 677858 B AU 7396494 A BR 9407460 A CA 2169262 A EP 0713595 A JP 9501784 T | 07-11-95 08-05-97 14-03-95 12-11-96 23-02-95 29-05-96 18-02-97 |

INTERNATIONAL SEARCH REPORT

| hatlonal | Application No |
|----------|----------------|
| √r/GB | 98/00015 |

| | | | T/GB 98/00015 | |
|--|---|--|--|---|
| A. CLASS IPC 6 | GOSB21/00 | | | |
| According | to International Patent Classification (IPC) or to both national class | Silication and IPC | | |
| B. FIELOS | SEARCHED | | | _ |
| Minimum d IPC 6 | ocumentation searched (classification system followed by classifi G088 A618 | cation symbols) | | |
| Documents | ation searched other than minimumdocumontation to the extent th | at such documents are included in | the fields searched | _ |
| Electronic | data base consulted during the International search (name of date | base and, where practical, search | terms used) | |
| C. DOCUM | ENTS CONSIDERED TO BE RELEVANT | | | _ |
| Category * | Citation of document, with indication, where appropriate, of the | relevant passages | Relevant to claim No. | _ |
| Α . | DE 44 00 207 A (MITSUBISHI) 7 see claims 1-18 | July 1994 | 1-11 | |
| A | EP 0 713 675 A (PIONEER ELECTRONIC CORP.) 29 May 1996 see claims 1-5 | | 1-11 | |
| A | WO 95 05649 A (VORAD SAFETY SYS February 1995 see abstract | TEMS) 23 | 1-11 | |
| | | | | |
| Furthe | er documents are listed in the continuation of box C. | X Patent femily members | are listed in annex. | 1 |
| A* document consider to filling data that the column which is chatten to column the column that the column thas the column that the column that the column that the column tha | t which may throw doubts on priority claim(s) or cited to ealabitsh the publicationdate of snother or other special reason (se specified) It referring to an oral disclosure, use, exhibition or | "X" document of particular relevention "X" document of particular relevent of particular re | onflict with the application but ciple or theory underlying the sunce; the claimed invention or cannot be considered to the total the sunce of the country is taken alone sunce; the claimed invention olve an inventive step when the one or more other such docuping obvious to a person skilled one patent family | |
| | iling address of the ISA European Patent Office, P.B. 5818 Patentisan 2 | 03/04/1998 Authorized afficer | | - |
| | NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, | | • | 1 |

Form PCT/ISA/210 (second sheat) (July 1992)

1

| NTERNATIONAL | SEARCH | REPORT |
|--------------|--------|--------|
|--------------|--------|--------|

| <u></u> | info on patent family men | nbers 3 % | | iB 98/00015 |
|---|---------------------------|---|-----------------------|--|
| Patent document of cited in search report | Publication date | Patent family member(s) | / | Publication data |
| DE 4400207 A | 07-07-94 | JP 6197888 KR 9710575 US 5574641 | В | 19-07-94 28-06-97 12-11-96 |
| EP 713675 A | 29-05-96 | JP 8140949 |) A | 04-06-96 |
| WO 9505649 A | 23-02-95 | US 5465079 AU 677858 AU 7396494 BR 9407460 CA 2169262 EP 0713595 JP 9501784 | B A A A A | 07-11-95 08-05-97 14-03-95 12-11-96 23-02-95 29-05-96 18-02-97 |

Form PCT/ISA/210 (patent family annex) (July 1992)





PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| Applicant's or agent's file DC277IP97040 | FO | R FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (PCT/IPEA/416) |
|--|--|--|---|
| International application | No. Internat | lonal filing date (day/month/year) | Priority date (day/month/year) |
| PCT/GB98/00015 | 05/01/ | | 04/01/1997 |
| International Patent Clas | sification (IPC) or national cla | saification and IPC | |
| G08B21/00 | | | |
| | | | |
| Applicant | | | |
| HORNE, James An | thony et al | | |
| and is transmitted | f to the applicant according | g to Article 36. | this International Prefiminary Examining Authority |
| 2. This REPORT co | nsists of a total of 5 shee | ts, including this cover sheet | , |
| which have | peen amended and are the | e basis for this report and/or s | escription, claims and/or drawlngs sheets containing rectifications made istrative Instructions under the PCT). |
| These annexes c | onsist of a total of 2 shee | uts. | |
| 3. This report contain | ns indications relating to th | ne following items: | |
| I ⊠ Bas | sis of the report | | |
| II 🔲 Prio | ority | · | |
| III 🗀 No | n-establishment of opinion | with regard to novelty, inven- | tive step and industrial applicability |
| IV □ Lad | k of unity of Invention | | |
| V 🛭 Re | asoned statement under A tions and explanations su | rticle 35(2) with regard to nov oporting such statement | vetty, inventive step or industrial applicability; |
| VI ☐ Cei | tain documents cited | | |
| VII 🛭 Ce | tain defects in the Internat | ional application | |
| VIII 🗵 Cei | tain observations on the ir | nternational application | |
| | | | |
| Date of submission of th | e demand | Date of comp | letion of this report |
| 29/07/1998 | | | 2 上 尼 98 |
| Name and mailing addre | | Authorized of | ficer Sylvoria micros |
| D-80298 Tel. (+49- | Patent Office Munich 89) 2399-0. Tx: 523656 epmu -89) 2399-4465 | | o. (+49-89) 2399-2705 |
| Form PCT/IPEA/409 (Cov | | Total Indiana | |



International application No. PCT/GB98/00015

| I. I | Basis | of the | report |
|------|-------|--------|--------|
| | | | |

| 1. | res | ponse to an invitati | drawn on the basis of (<i>substitute</i> ion under Article 14 are referred do not contain amendments.): | sheets which to in this repo | n have been furnished ort as "originally filed" a | to the receiving Office in and are not annexed to |
|----|-----|--|--|---------------------------------|--|--|
| | Des | scription, pages: | | | | |
| | 1-1 | 5 | as originally filed | | | |
| | Cla | îms, No.: | | | | |
| | 1-1 | 0 | as received on | 30/11/1998 | with letter of | 27/11/1998 |
| | Dra | wings, sheets: | | | | |
| | 1/3 | 0-30/30 | as originally filed | | | |
| 2. | The | amendments have | e resulted in the cancellation of: | | | |
| | | the description, | pages: | | | |
| | | the claims, | Nos.: | | | |
| | | the drawings, | sheets: | | • | |
| 3. | | This report has be considered to go be | een established as if (some of) the beyond the disclosure as filed (F | ne amendmen Rule 70.2(c)): | its had not been made | s, since they have been |
| | | | | | | |

4. Additional observations, if necessary:





INTERNATIONAL PRELIMINARY **EXAMINATION REPORT**

International application No. PCT/GB98/00015

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes:

Claims 1-10

No:

Claims

Inventive step (IS)

Yes:

Claims

No:

Claims 1-10

Industrial applicability (IA)

Yes:

Claims 1-10

No:

Claims

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

rangang kangang ang mangang mangang mangang mangang mangang manggang kangang mangang mangang mengang mengang k

INTERNATIONAL PRELIMINARY International application No. PCT/GB98/00015 EXAMINATION REPORT - SEPARATE SHEET

- 1. The following document(s) will be referred to in this report; the numbering will be adhered to in the rest of the procedure:
 - D1 DE-A-44 00 207 [MITSUBISHI JIDOSHA KOGYO K.K.]

The subject-matter of document D1 is considered to represent the prior art the closest to that of the present application.

2. In the following discussion, the patentability of the claims will be examined with regard to the requirements of the PCT. In particular, the claims will be examined for novelty, as defined in 33(2) PCT, and for inventive step, as defined in Art. 33(3) PCT. In addition other aspects, such as clarity requirements of Art. 6 PCT, may be discussed as appropriate.

2.1 Claim 1

As far as can be understood, claim 1 appears to be new, Art. 33(2) PCT. However, claim 1 lacks an inventive step over the prior art, Art. 33(3) PCT.

Document D1 is considered to represent the closest prior art to the present invention. Claim 1 differs from D1 in that it comprises a personal data interface. The person skilled in the art would provide whatever interface was required without making an inventive step. The inclusion of this feature is therefore considered not to represent an inventive step. However, it is noted that if a new claim had been filed where such personal data was used in arriving at the detection of sleepiness, the examiner is of the provisional opinion that this could have been considered as an inventive feature. In the present claim this is merely an optional feature.

Claim 1 is not allowable under Art. 6 PCT since it is unclear for the following reasons:

- a. the feature "of circadian algorithm" has no meaning.
- 2.2 Claims 2 to 4.

Claim 2 to 4 are not allowable because they lack an inventive step, Art. 33(3) PCT. The reason being that none of the features of claims 6 to 10 appear to contribute subject matter which goes beyond routine work for the person skilled in the art.

2.3 Claim 5

Claim 5 is not allowable since it contains subject matter which is not found in the original

معمل در محموم و دوران روز را مروز را در در این استخدار این استخدار این معموم برای مصمر می در در این

Form PCT/Separate Sheet/409 (Sheet 1) (EPO-April 1997)



INTERNATIONAL PRELIMINARY International application No. PCT/GB98/00015 EXAMINATION REPORT - SEPARATE SHEET

disclosure, in particular the feature of "driver or operator environment" is broader than the term "cab temperature" upon which it appears to be based. The claim therefore appears to be not allowable under Art. 34 2 b PCT.

If this feature were returned to it's original form, it would however not involve an inventive step. The examiner is of the opinion that it is obvious to monitor cab temperature in assessing sleep tendency.

2.4 Claim 6

Claim 6 merely offers an alternative sleepiness causing monitor factor to the prior art D1. The person skilled in the art would use any such data for monitoring sleep tendency without making an inventive step.

2.5 Claims 7 and 8

Claims 7 and 8 contain subject matter which appears to be both new and to involve an inventive step, Art. 33(2) and (3) PCT.

2.6 Claim 9

Claim 9 relies for the definition of its scope on features which are only to be found in the drawings. As such the scope of the claim is unclear and it therefore offends against Art. 6 PCT.

2.7 Claim 10

D1 also discloses a vehicle, see fig. 2, therefore the subject matter of claim 10, which refers to claim 1, is lacking in inventive step, Art. 33(3) PCT.

Claim 10 would have been allowable, had it referred to claims which were themselves allowable.

- 3. In the following section, certain defects in the International Application will be noted.
- 3.1 Document D1 should have been mentioned in the description in accordance with Rule 5.1 a li PCT
- 3.2 The description should have been brought into accordance with the claims presently on file in accordance with Rule 5.1 a iii PCT.

Form PCT/Separate Shcet/408 (Sheet 2) (EPO-April 1997)

ATIONAL SEARCH REPORT

rnational Application No

/GB 98/00015

| A. CLASSIF | FICATION O | F SUBJE | COTATTER |
|------------|------------|---------|----------|
| TPC 6 | G08R2 | 1/00 | CATTER |

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G08B A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | DE 44 00 207 A (MITSUBISHI) 7 July 1994 see claims 1-18 | 1-11 |
| Α | EP 0 713 675 A (PIONEER ELECTRONIC CORP.) 29 May 1996 see claims 1-5 | 1-11 |
| A | WO 95 05649 A (VORAD SAFETY SYSTEMS) 23 February 1995 see abstract | 1-11 |

| Further documents are listed in the continuation of box C. | Patent family members are listed in annex. |
|---|---|
| Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family |
| Date of the actual completion of theinternational search | Date of mailing of the international search report |
| 25 March 1998 | 03/04/1998 |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nt, Fax: (+31-70) 340-3016 | Authorized officer Sgura, S |

1

ATIONAL SEARCH REPORT

PCT/GB 98/00015

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|---|--|
| DE 4400207 A | 07-07-94 | JP 6197888 A KR 9710575 B US 5574641 A | 19-07-94 28-06-97 12-11-96 |
| EP 713675 A | 29-05-96 | JP 8140949 A | 04-06-96 |
| WO 9505649 A | 23-02-95 | US 5465079 A AU 677858 B AU 7396494 A BR 9407460 A CA 2169262 A EP 0713595 A JP 9501784 T | 07-11-95 08-05-97 14-03-95 12-11-96 23-02-95 29-05-96 18-02-97 |